

**HEALTH AND SAFETY PLAN**  
**CENTEX HOMES – STERLING PROPERTY**  
**VALLEY CIRCLE BIVD. @ ROSCOE BOULEVARD**  
**WEST HILLS, CALIFORNIA**  
**JOB NO. 05-8520 EI**

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## A. INTRODUCTION

The purpose of this Health and Safety Plan is to provide a basic framework for the environmental sampling at the project site located west of the intersection of Valley Circle Boulevard and Roscoe Boulevard, West Hills, Los Angeles County, California. The procedures contained in this plan will apply to all Allwest Remediation, Inc., employees, subcontractors, and visitors to the site.

### 1. Site Description

The subject site is located west of the intersection of Valley Circle Boulevard and Roscoe Boulevard in the City of West Hills. A location map has been provided in Figure 1.

### 2. Project Description

The objective of the scope of work included herein is to conduct soil sampling to assess the presence of volatile organic compounds (VOCs), CAM Metals, petroleum hydrocarbons, hydrazine, dioxins, and perchlorate in site soils. The site is generally undeveloped, with a small number of existing residences.

## B. ORGANIZATION AND COORDINATION

Allwest Remediation, Inc.'s project manager for this site is:

Richard Scott  
1210 N. Barsten Way  
Anaheim, CA 92806  
(714) 237-1201

Allwest Remediation, Inc., project manager shall oversee the entire project to ensure that all provisions of this Health and Safety Plan are adhered to by all field personnel. Allwest Remediation, Inc., reserves the right to make adjustments to staffing as it deems appropriate. Allwest Remediation, Inc., project manager shall report directly to the owner.

### 1. SITE SAFETY OFFICER

The Implementing Officer for this project is Allwest Remediation, Inc., project manager Mr. Richard Scott. However, a Site Safety Officer (SSO) shall be designated from Allwest Remediation, Inc., on-site staff as deemed appropriate for the phase of work in progress at the site. During drilling operations, the Allwest Remediation, Inc., Site Safety Officer will be the on-site geologist in charge of supervising drilling activities. During construction and operation phases of the remediation system, Allwest Remediation, Inc., Site Safety Officer will be designated as the senior-most staff member on-site. In all cases, the Allwest Remediation, Inc., designated Site Safety

Officer will have received 40 hour training satisfying the requirements of the OSHA Hazardous Waste Operators and Emergency Response Standard (29 CFR 1910.120) and will be responsible for directing and controlling all site activities and enforcing on-site compliance with the provisions of the Site Health and Safety Plan. Allwest Remediation, Inc., reserves the right to make adjustments to staffing.

The SSO duties include:

- o Determine the level of respiratory protection required for the work activity.
- o Conduct daily tailgate site safety meetings, which all on-site personnel shall be required to attend.
- o Maintain, inspect and control an adequate inventory of safety equipment at the site.
- o Monitor any site decontamination procedures.

#### C. SITE CONTROL

For the purpose of identifying the perimeters of functional safety zones on the site, barricades, traffic cones, and/or warning tape will be used. Allwest Remediation, Inc., shall provide site control for sampling operations through the use of barricades, traffic cones and/or warning tape as necessary to prevent unauthorized personnel from entering the area. The SSO will be responsible for monitoring personnel compliance within the site safety zones.

##### 1. Authorization for Site Entry

In order to be authorized for work being conducted requiring a level of protection greater than Level D, all personnel entering the exclusion zone must be certified by their employer and have on record the following requirements:

- o Examination by a licensed physician within the previous 12 months and determined to be physically able to perform work while wearing respiratory protective equipment.
- o Training in the proper use of respirators and their use.
- o Respirator fit test program.
- o Records of the above to be kept in a central file.

##### 2. Site Entry Procedures

The SSO will be responsible for conducting site entry protocol. These activities will include:

- o Establish exclusion zone, depending on location of work.
- o Confirm proper placement of emergency information.
- o Note physical conditions at the site and visually observe for signs of actual or potential conditions which may be dangerous to life or health.
- o Discuss observations with on-site personnel during daily pre-entry briefings.

All personnel entering the site and/or exclusion zones must first check in with the SSO. Site personnel must:

- o Arrive at the site in clean work clothes each day.
- o Follow site safety procedure as outlined by the SSO.
- o Adhere to the Allwest Remediation, Inc., Health and Safety Program.

#### D. SITE MONITORING

Field activities associated with construction and sampling may create potentially hazardous conditions, such as release of hazardous substances into the breathing zone.

These substances may enter the body through ingestion, inhalation, absorption, and direct contact. Monitoring of these substances must be performed to ensure appropriate personal protective measures are employed during invasive site activities.

Atmospheric vapor concentrations will be monitored as necessary using a Photoionization Detector (PID) (or equivalent) to determine appropriate action levels. The PID will be equipped with a 10.2 eV light source and shall be calibrated by Allwest Remediation, Inc., personnel prior to use for organic vapor detection in the field. Calibrations will be performed in accordance with manufacturer specifications and recorded in a log book kept with the instrument.

##### 1. Action Levels

The action level for atmospheric vapor concentrations at this site has been designated as 50 ppm total volatile organic compounds (VOCs) as measured by the PID. This action level is consistent with OSHA's permissible exposure limit (PEL) for all contaminants present at this site. If concentrations in the breathing zone exceed these levels, the SSO will take appropriate action, notify the Project Manager, and apply engineering controls (i.e. stop work until vapors dissipate or don protective equipment, etc.) to limit the concentration of VOCs in the breathing zone.

##### 2. Level D Protection

As long as concentrations of VOCs within the breathing zone remain below 50 ppm, work will be conducted without respiratory protection.

### 3. Level C Protection

If concentrations above 50 ppm of VOCs are encountered for longer than 5 minutes in the breathing zone, the level of respiratory protection will be evaluated by the SSO and upgraded, as needed.

## E. PERSONAL PROTECTIVE EQUIPMENT

Based on an evaluation of the hazards of the site, personal protective equipment will be required for all personnel and visitors entering the controlled portion of the site. Protective equipment for each level of protection is as follows:

### 1. Level C Protection

- o Full or half-face air purifying respirator
- o Safety glasses if half-face respirator is being used during invasive work.
- o Steel-toed boots.
- o Hard hat.

### 2. Level D Protection

- o Safety glasses.
- o Steel-toed boots.
- o Hard-hat.
- o Disposable nitrile gloves

## F. DECONTAMINATION PROCEDURES

### 1. Equipment Decontamination

All sampling equipment, including soil samplers (California modified split spoon, continuous core, etc.), sampling tubes, chemical resistant gloves, etc., will be decontaminated using Alconox, trisodium phosphate (TSP) or an equivalent detergent solution between each sample depth to eliminate cross contamination of samples. The following decontamination procedure will be followed for all sampling equipment:

- a. Submerge equipment in a water and Alconox (or equivalent) detergent solution and scrub with dedicated decontamination brushes.
- b. Rinse with tap water.
- c. Rinse with distilled water.

Decontaminated soil sample sleeves and caps will be stored on a clean, polyethylene sheet or in a covered container until use. Teflon tape, used to seal the sample tubes before placement of the plastic caps, will be pre-cut or cut to size in the field and placed in clean ziplock bags until use.

Prior to placement or use of any drilling equipment in any boring and between borings, all downhole equipment will be thoroughly decontaminated by steam-cleaning or flushing with tap water.

Hollow stem augers will be steam cleaned in a decontamination trough prior to use and between boreholes. The rinsate water contained in the trough will be pumped into 55-gallon drums approved by the United States Department of Transportation (DOT) or a polyethylene holding tank and held on site pending laboratory analysis and proper disposal. Drill cuttings, if stockpiled, will also be stored on a polyethylene sheet to prevent contact between clean and contaminated soil.

If drill cuttings are not stockpiled on site, they will be contained in 55-gallon DOT approved drums. Upon completion of field activities, all drums will be transported to a pre-determined on-site location for temporary storage. Each drum shall be clearly marked (using indelible ink) with the following information:

- o Allwest Remediation, Inc., Address and Phone Number
- o Site Address
- o Contents: Soil or Water
- o Corresponding Boring or Well Number
- o Date Generated

An inventory of drums and any pertinent analytical results, shall be provided to the facility operator to facilitate proper disposal.

## 2. Clothing Decontamination

All field personnel will have a respirator on-site. Respirators will be disassembled and cleaned according to manufacturer specifications after each use. Respirators and respirator cartridges will be stored in dust-free zip-lock bags between use.

New surgical type latex gloves, used as protective inner liners, shall be replaced a minimum of twice per day, once before work starts in the morning and at mid-day or more often as they become punctured. Outer chemical resistant gloves shall be decontaminated after use as outlined above for downhole equipment (using a triple rinse solution and detergent).

Contaminated clothing generated during field activities at the site shall be kept separate from day to day clothing and shall be separately washed as soon as possible after daily field activities cease. Chemical resistant overalls (e.g., Tyvek), if required, shall be replaced with new overalls on a daily basis.

#### G. SITE SAFETY

The site zone layout and procedures should match the prescribed levels of personal protection. A detailed discussion for the establishment of the safety zone and the procedures required for the various levels of personal protection follows. These zones will be maintained if respiratory protection is required during site activities. The SSO will establish, control, and monitor these areas accordingly.

##### 1. Exclusion Zone (EZ)

Appropriate personal protection must be worn in this zone. This zone is normally separated from the non-exclusion zone by a hot-line or barrier to prevent personnel from entering the exclusion zone without protective equipment. The exclusion zone will be utilized on a "dynamic" basis, located at the current drilling area and will extend to an area that exhibits elevated levels of VOCs.

##### 2. Support Zone (SZ)

The support zone is considered to be hydrocarbon and toxic-free, and respiratory equipment is not required but will be available for emergency use, if necessary. All equipment and materials will be stored within this zone. Donning of respiratory equipment is done in the support zone before entering the exclusion zone.

#### H. JOB HAZARD ANALYSIS

##### 1. Work/Rest Regimes - Heat Stress Prevention

The SSO shall monitor ambient temperature and implement work/rest regimes depending on temperature. For ambient temperatures below 80°F, standard rest breaks, e.g. 15 minutes every 4 hours, should be used. For temperatures above 80°F, the following regimen should be implemented:

<u>Temperature</u>	<u>Work</u>	<u>Rest</u>	<u>Comments</u>
80° to 85° F	2 hours	5 minutes	Review heat stress in safety meeting. Schedule water break every 2 hours maximum.
85° to 90° F	2 hours	15 minutes	Seated rest and at least 8 oz. beverage at break.
Above 90° F	1.5 hours	15 minutes	As above with shaded rest area.

## 2. Physical

Hazards typically encountered at undeveloped sites will be present, namely, slippery ground and uneven terrain. Additionally, hazardous fauna (e.g. spiders, snakes, insects, etc.) and flora (poison oak, cacti, etc.) may be encountered on the site. A fire hazard may also exist due presence dry brush.

Underground Service alert (USA) will be notified in advance of all underground excavation or drilling operations to be performed, and the location of all utilities marked by utility companies will be taken into account prior to performance of any invasive activities at the site. In addition, all soil borings will be initiated with a hand auger for the first five feet and widened with a post hole digger prior to use of any mechanical drilling equipment beneath the ground surface.

## 3. Chemical

Contaminants potentially present in site soils subsurface include volatile organic compounds (VOCs), CAM Metals, petroleum hydrocarbons, hydrazine, dioxins, and perchlorate.

# I. EMERGENCY PROCEDURES

Emergency communications at the site will be by means of a cellular telephone or use of the telephone inside the existing building on the site. A list of emergency telephone numbers is presented in Section K.

The following general procedures will be followed int the case of a medical emergency at the site:

## 1. Inhalation

If warning symptoms such as dizziness, headache, nausea, shortness of breath, burning in the mouth or other symptoms indicative of the exposure is experienced, the victim will leave the controlled area of the site immediately. If the victim is no longer breathing, rescuers wearing respiratory protection will first remove the victim from the



contaminated area. Cardiopulmonary resuscitation will be attempted immediately, and medical attention will be obtained as soon as possible.

## 2. Ingestion

Medical attention will be sought immediately.

## 3. Eye Contact

If eye contact is made with any of the materials at the site, the eye will be flooded with eyewash solution or water for at least 15 minutes. Medical attention will be obtained as soon as possible.

## 4. Skin Contact

Skin exposure will be treated by washing with soap and water. Any contaminated clothing will be removed.

All injuries occurring on the site, no matter how minor, will be immediately reported to the SSO. The SSO shall evaluate the extent of the injury, arrange for appropriate medical attention and investigate the cause of the injury.

In the case of evacuation, all personnel will assemble at the Allwest Remediation, Inc., meeting point. When the site is evacuated due to an on-site emergency, personnel shall not re-enter until:

- o The conditions resulting in the emergency have been corrected.
- o The hazards have been re-assessed.
- o The Site Health and Safety Plan has been reviewed.
- o Site personnel have been briefed on any changes in the safety plan.

## J. TRAINING AND COMMUNICATION

Training on the hazards at the site will be conducted at the start of the project and as conditions and personnel change. This plan will be reviewed with project personnel prior to their entry onto the site.

The initial training will include the following subjects at a minimum:

- o Nature of the hazards, including the locations of the site Material Safety Data sheets (MSDS) for chemicals at the site.
- o A description of the levels of personal protection at the site and the condition for selection of each level.

- o Emergency procedures.
- o Demonstration of respiratory equipment.
- o Review of safe work practices at the site and identifications of forbidden practices.

Safety meetings will be conducted at the site to review work plans and safety practices associated with them. These meetings will be conducted by the SSO, and attendance by all Allwest Remediation, Inc., employees and their subcontractors will be mandatory. All personnel will be required to sign Allwest Remediation, Inc., Tailgate Safety Meeting Form signifying understanding and adherence to the Health and Safety Plan. A copy of the Tailgate Safety Meeting Form is included in Appendix A.

#### K. CONTACTS AND EMERGENCY TELEPHONE NUMBERS

The following is a reference list of contacts and telephone numbers for this project:

Client Contact: Centex homes, John Fitzpatrick (

Allwest Remediation, Inc., Project Manager: Richard Scott (714) 237-1201

Allwest Remediation, Inc., Site Safety Officer: Allwest Remediation, Inc., Personnel  
(Designated from staff as appropriate) (714) 237-1201

##### 1. Emergency Telephone Numbers

- a. General/All Emergencies - dial 911
- b. Ambulance - dial 911
- c. Hospital:

A map with directions to the hospital is provided in Figure 1

West Hills Hospital and Medical Center  
7300 Medical Center Drive  
West Hills, CA 91307  
(818) 676-4000

- d. Police Department - dial 911
- e. Fire Department - dial 911

This Health and Safety Plan has been reviewed and is presented by:

ALLWEST REMEDIATION, INC.

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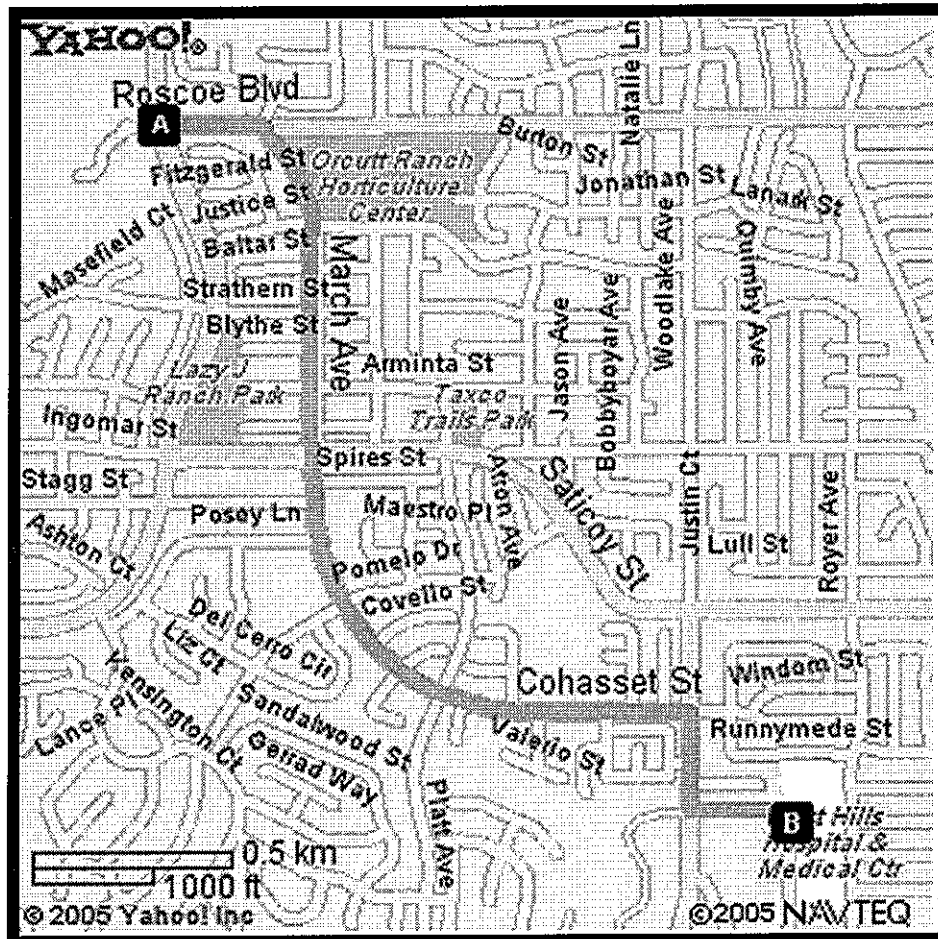
RICHARD SCOTT  
Operations Manager

Date

**FIGURE 1**  
**HOSPITAL LOCATION MAP**

Centex – Sterling Community  
Valley Circle Blvd. @ Roscoe Blvd.  
West Hills, CA

Project Number: 05-8520 EI



SOURCE: Yahoo Maps, 2005

**DIRECTIONS:**

- From the intersection of Valley Circle Blvd. and Roscoe Blvd., travel **EAST** on Roscoe Blvd for 0.2 miles
- Turn **RIGHT** on March Ave. and travel for 1.0 miles. March Avenue becomes Cohasset St., continue 0.4 miles
- Turn **RIGHT** on Woodlake Dr. and travel for 0.2 miles.
- Turn **LEFT** on Medical Center Dr. and travel for 0.2 miles
- Arrive at **West Hills Hospital and Medical Center** on the left



**ALLWEST REMEDIATION, INC.  
STANDARD OPERATING PROCEDURES  
DRILLING AND SAMPLING PROTOCOL  
USING A HOLLOW STEM AUGER**

**Drilling Protocol**

The following drilling protocol shall be observed on all Allwest Remediation, Inc., drilling sites:

- o Permits to drill soil borings will be obtained in advance from the appropriate agency, if necessary.
- o Underground Service Alert will be notified in advance of drilling activities.
- o An Allwest Remediation, Inc., tailgate safety meeting will be conducted prior to drilling.
- o All soil borings shall be initiated with a hand auger and widened with a post hole digger for the first five feet to avoid encountering underground utilities with the hollow stem auger.
- o Breathing space will be monitored during drilling with an organic vapor meter or photoionization detector (as per Allwest Remediation, Inc.'s Health and Safety Plan).
- o Soil samples will be collected at five foot intervals and at significant changes in lithology.
- o Blow counts are to be recorded for the last twelve inches of sampler advancement.
- o Decontamination of samplers between sampling depths shall be ensured using the standard triple rinse procedure.
- o Decontamination of hollow stem augers between borings shall be ensured.
- o Soil cuttings and samples will be logged in a field log per the Unified Soil Classification System and the information entered onto a boring log form.

**Hollow Stem Auger**

All soil and well borings will be hand augered for the first five feet and widened with a post hole digger to the appropriate auger diameter prior to drilling. This procedure prevents drilling through underground utilities.

Drilling will be accomplished using a truck-mounted drill rig with high torque capability. The specific drilling rig used will be chosen based on boring depth and site specific circumstances, such as drilling conditions, overhead obstructions, restricted drilling area, etc. Borings will be advanced to the depths designated in the work plan (or drilling sampling plan) using continuous flight hollow stem augers. The appropriate diameter hollow stem augers will be chosen based on the intended purpose of the boring(s). In all cases the smallest diameter auger which will accommodate the intended use of the boring will be chosen to minimize generation of excess soil cuttings during drilling.

**ALLWEST REMEDIATION, INC.  
STANDARD OPERATING PROCEDURES**

**DECONTAMINATION PROTOCOL  
FOR DRILLING, SOIL, AND GROUNDWATER  
SAMPLING ACTIVITIES**

**Decontamination Procedures**

All downhole soil and groundwater sampling equipment, including soil samplers (California modified, split spoon and continuous core), sampling tubes, well bailing and surging equipment, water level meters, etc., will be decontaminated using Alconox, trisodium phosphate (TSP) or an equivalent detergent solution between each borehole and between each sampling depth to eliminate cross contamination of samples. The following decontamination/rinsing procedure will be followed for all sampling equipment:

1. Submerge equipment in a water and Alconox (or equivalent) detergent solution and scrub with dedicated decontamination brushes.
2. Rinse with tap water.
3. Rinse with distilled water.

Decontaminated sample sleeves and caps will be stored on a clean polyethylene sheet or in a covered container until use. Teflon tape used to seal the sample tubes before placement of the plastic caps will be cut to size in the field and placed in a clean ziplock bags until use.

Prior to placement or use of any drilling equipment in any boring and between borings, all downhole equipment will be thoroughly decontaminated by steam-cleaning or flushing with tap water. Hollow stem augers will be steam cleaned in a decontamination trough prior to use and between boreholes. The rinsate water contained in the trough will be pumped into 55-gallon drums approved by the United States Department of Transportation (DOT) or a polyethylene holding tank and held on-site pending laboratory analysis and proper disposal.

Upon completion of field activities, all drums will be transported to a pre-determined on-site location for temporary storage. Each drum shall be clearly marked (using indelible ink) with the following information:

1. Allwest Remediation, Inc.'s Address and Phone Number.
2. Name of Client.
3. Contents: Soil or Water
4. Corresponding Boring or Well Number.
5. Date Generated.

An inventory of drums shall be provided to the facility operator to facilitate proper disposal.

## TAILGATE SITE SAFETY MEETING

I have reviewed the Allwest Remediation, Inc., Site Health and Safety Plan for the project.

I understand its purpose and consent to adhere to the policies and procedures. Further, I

am fully knowledgeable in the safe operating procedure of my equipment and will perform

my work in a safe manner. I will notify my supervisor of any unsafe conditions or hazards

I see.

Employee Name

Employee Signature

Date \_\_\_\_\_

Employee Name

Employee Signature

Date \_\_\_\_\_

Employee Name

Employee Signature

Date \_\_\_\_\_

Employee Name

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